WHAT IS CLAIMED IS:

1. A method of determining whether to recalibrate a blood pressure monitor which calculates blood pressure using a calibration signal from a calibration device indicative of an accurate measurement of the blood pressure of a patient and using a continuous signal from a sensor indicative of a continuous noninvasive measurement of one or more attributes of one or more waves propagating along an artery of the patient, the method characterized by:

approximating a function relating a change in a trigger parameter to a change in a pressure-velocity relationship, wherein the pressure-velocity relationship is used to noninvasively determine the blood pressure of a patient;

calibrating the pressure-velocity relationship using a calibration signal indicative of a first accurate measurement of the blood pressure, and using a continuous signal indicative of a continuous noninvasive measurement of one or more attributes of one or more waves propagating along an artery of a patient;

calculating a first value of the trigger parameter from the continuous signal;

calculating the blood pressure using the pressure-velocity relationship and the continuous signal;

calculating a second value of the trigger parameter from the continuous signal;

calculating a change in the pressure-velocity relationship by applying the pressure-velocity relationship and the first and second values of the trigger parameter to the function; and

when the change in the pressure-velocity relationship exceeds a threshold value, recalibrating the pressure-velocity relationship using the continuous signal and using a calibration signal indicative of a second accurate measurement of the blood pressure.

2. The method of Claim 1, further comprising updating the function for each patient with the calibration signal when the function produces unacceptable results.

3. The method of Claim 1, wherein the trigger parameter comprises a measurement of dispersion.

4. The method of Claim 3, wherein calculating the trigger parameter comprises:

calculating propagation velocities along the artery for induced perturbations of a plurality of frequencies over a pulse of blood pressure;

selecting a representative value of the propagation velocities;

calculating a linear regression of the representative value versus data from the induced perturbations; and

calculating the slope of the linear regression.

5. The method of Claim 4, wherein the representative value comprises the mean value of the propagation velocities over the pulse of blood pressure.

6. The method of Claim 1, wherein the trigger parameter comprises a measurement of attenuation.

7. The method of Claim 6, wherein calculating the trigger parameter comprises:

calculating propagation phase delays along the artery and propagation amplitudes for induced perturbations of a plurality of frequencies over a pulse of blood pressure;

calculating a representative value including a measure of the propagation amplitudes;

calculating a linear regression of the representative value versus the propagation phase delays from the plurality of frequencies; and

calculating a value of the linear regression representing attenuation.

8. The method of Claim 7, wherein the value of the linear regression represents one of an intercept and a slope.

9. The method of Claim 7, wherein the representative value comprises the equation $\ln(Gv^2/\sin(kL/2))$, wherein G comprises a relative propagation amplitude, v comprise a propagation velocity, k comprises a propagation vector, and L comprises a length of propagation.

10. The method of Claim 1, wherein the pressure-velocity relationship comprises $Vel(t) = a + bP(t)$, wherein Vel comprises velocity, P comprises pressure, t comprises time, and a and b are constants.

11. The method of Claim 1, wherein the function comprises the change in the pressure-velocity relationship being equal to a constant times the change in the trigger parameter.

12. A method of examining the internal consistency of values derived in different ways from several sources to continuously determine the blood pressure of a patient, the method characterized by:

receiving a calibration signal from a calibration device configured to provide an accurate representation of the blood pressure of a patient;

receiving a continuous signal from a sensor configured to detect one or more attributes of a perturbation of an artery of the patient;

calibrating, with the calibration signal, one or more of a plurality of parameters derived from at least the continuous signal;

calculating the blood pressure of the patient from one or more of the plurality of parameters;

tracking one or more of the a plurality of parameters; and

when the one or more tracked parameters exceed a threshold, recalibrating the one or more calibrated parameters.

13. The method of Claim 12, wherein the one or more tracked parameters comprises a pressure-velocity relationship.

14. The method of Claim 12, wherein the one or more tracked parameters comprises a change in a pressure-velocity relationship.

15. The method of Claim 12, wherein the one or more tracked parameters comprises a trigger parameter.

16. The method of Claim 15, wherein the trigger parameter comprises one of dispersion and attenuation.

17. The method of Claim 12, wherein the one or more tracked parameters comprises a change in a trigger parameter.

18. The method of Claim 17, wherein the trigger parameter comprises one of dispersion and attenuation.

19. The method of Claim 12, wherein the one or more tracked parameters comprises a combination of values of a pressure-volume relationship and a trigger parameter.

20. A noninvasive blood pressure monitor, characterized by:

an input calibration signal from a calibration device configured to provide an accurate representation of the blood pressure of a patient;

an input noninvasive sensor signal from a sensor configured to detect one or more attributes of a perturbation of an artery of the patient; and

a processor which determines when to employ the input calibration signal to recalibrate one or more of a plurality of parameters, wherein the processor uses the plurality of parameters and the input noninvasive sensor signal to continuously calculate the blood pressure of the patient.

21. The noninvasive blood pressure monitor of Claim 20, wherein the one or more parameters comprise a combination of values of a pressure-volume relationship and a trigger parameter.

22. The noninvasive blood pressure monitor of Claim 21, wherein the trigger parameter comprises dispersion.

23. The noninvasive blood pressure monitor of Claim 21, wherein the trigger parameter comprises attenuation.